

REPLACEMENT DRAWINGS

Attached hereto are replacement drawings for figure 11 (along with figure 10 which is not amended) without any markings. The changes to the drawings are explained below, in the "REMARKS" section. All of the drawings on the replacement sheet, as originally filed, are provided herein (figures 10 and 11). The header of the revised drawing sheet includes the following information: (i) "Replacement Sheet", (ii) Title of Invention, (iii) Inventor Name, and (iv) Application Serial Number. The Examiner is requested to provide an indication of such consideration in the next Office Action.

REMARKS

Claims 1-20 are currently pending in the application. Claims 1 and 15 are independent claims. By this amendment, the abstract and figure 11 overcome the objections in the outstanding Office Action. No new matter has been added. Support for the specification and drawing amendments are discussed below. Reconsideration and withdrawal of all pending objections in view of the above amendments and following remarks is respectfully requested.

Moreover, by this amendment, claims 4, 6, 7, 9, 12, 13, 15, 19, and 20 are amended to overcome the objections and rejections in the outstanding Office Action. No new matter has been added. Support for the amendments is discussed below. Reconsideration and withdrawal of all pending objections and rejections in view of the above amendments and following remarks is respectfully requested.

Applicants further note with appreciation the Examiner's acknowledgment of Applicants' claim for foreign priority under 35 U.S.C. § 119 and receipt of the certified copy of the priority document.

Applicants further note with appreciation the Examiner's consideration of the documents cited in the Information Disclosure Statement filed in the present application by the return of the initialed and signed copy of the PTO-1449 Form accompanying the Information Disclosure Statement filed therewith.

Objection to Drawings

In the Non-Final Office Action, the Examiner has objected to the drawings for not showing every reference numeral. In response thereto, this objection has been overcome by amending Figure 11 so that reference numerals "80A" and "80B" are "90A" and "90B". This change is supported by the specification at page 12, lines 10-16 which describes "90A" and "90B" in conjunction with Figure 11.

In view of the above amendments and arguments, withdrawal of all pending drawing objections is respectfully requested.

Objection to Abstract

In the Office Action, the Examiner objected to some minor language formalities in the abstract.

In order to expedite prosecution of the present application, the Abstract has been amended so that "portion" has replaced "potion" as shown in the amended abstract and as suggested by the Examiner.

Accordingly, Applicants respectfully request withdrawal of the objection to the Abstract.

Objection to Claims

In the Office Action, Claim 6-8, 11, 19, and 20 are objected to as having minor informalities.

Claims 6 and 19 have been amended, as suggested by the Examiner, to recite in the singular --electrode is--. Claims 7 and 20 have been amended to recite --shaped sub-electrode-- in order to be more consistent. These amendments are made for the sole purpose of correcting grammatical error. These amendments are not made for the purpose of avoiding prior art or narrowing the claimed invention, and no change in claim scope is intended. Therefore Applicants do not intend to relinquish any subject matter by these amendments. Applicants respectfully submit that claim 6, 7, 19, and 20, as amended, as well as claims 7, 8, and 11 overcome the stated objection. Accordingly, Applicants respectfully request withdrawal of the objection to claims 6-8, 11, 19, and 20.

35 U.S.C. §112 Rejection, Second Paragraph

Claims 4 and 12-14 stand rejected under 35 U.S.C. §112, 2nd paragraph as being indefinite. This rejection is respectfully traversed.

Claim 4 has been amended to clarify the antecedent basis of the "second container" by adding a positive recitation thereof to the fifth line of claim 4. Claims 12 and 13 have been amended to clarify the electrode recited therein is the plurality of electrodes. These amendments are made for the sole purpose of clarifying claims. These amendments are not made for the purpose of avoiding prior art or narrowing the claimed invention, and no change in claim scope is intended. Therefore, Applicants do not intend to relinquish any subject matter by these amendments.

Accordingly, withdrawal of the rejection of claims 4 and 12 -14 is respectfully requested.

35 U.S.C. § 102 Rejection

Claims 1-11 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,677,590 to Matsuda et al. This rejection is respectfully traversed.

In order for a rejection under 35 U.S.C. § 102(b) to be proper, a single reference must disclose every claimed feature. To be patentable, a claim need only recite a single novel feature that is not disclosed in the cited reference. Thus, the failure of a cited reference to disclose one or more claimed features renders the 35 U.S.C. § 102(b) rejection improper.

The invention is directed to an electron gun and, in particular, an electron gun having, *inter alia*, a plurality of electrodes and an anode. One of the plurality of electrodes is a multiple element electrode. In particular, the multiple element electrode has a first sub-electrode and a second sub-electrode. Exemplary aspects of the multiple element electrode having a first sub-electrode and a second sub-electrode are shown in Figures 2 and 5-11.

Matsuda et al discloses an electron gun in Figure 2. The electron gun has a cathode K and electrodes 2-7. The Examiner asserts that the electrode shown in figure 4 anticipates Applicants' multiple element electrode having a first sub-electrode and a second sub-electrode having gaps formed between.

However, contrary to the present disclosed invention, the Figure 3 embodiment of Matsuda et al. shows a manufacturing process with one of the electrodes in a manufacturing device. Figure 3 appears to be an intermediate step in the manufacturing process. In this regard, Matsuda et al. discloses at column 7, lines 27-28, "laser-welding the electrode elements together with their flanges being butted against one another." Accordingly, it is clear from the disclosure that once the manufacturing process is complete there is no gap formed between the composite electrode. That is, the flanges are butted against each other and there would clearly be no gap.

Similarly, the Figure 5 embodiment of Matsuda et al. shows a manufacturing process with one of the electrodes in a similar manufacturing device. Figure 5 also appears to be an intermediate step in the manufacturing process. In this regard, Matsuda et al. discloses at column 9, lines 59-61, that the electrode elements are "laser-welded with the flanges or the electrode bottom portions of both electrode elements being butted against each other." Accordingly, it is clear from the disclosure that once the manufacturing process is complete there is no gap formed between the composite electrode. In fact, Matsuda et al. is silent to any gap or gap formation with respect to the electrode elements.

Accordingly, Applicants respectfully request that the rejection over claims 1-11 be withdrawn.

35 U.S.C. § 103 Rejection

Claims 15-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over

Matsuda et al. in view of U.S. Patent No. 6,642,646 to Kwon. This rejection is respectfully traversed.

Noting that Matsuda et al. does not disclose electrodes that receive a voltage, the Examiner alleges it would have been obvious to modify the teachings of Matsuda et al. with the teachings of Kwon. See Office Action, paragraph bridging pages 9-10. The Examiner further argues that such a combination would result in the claimed invention.

However, even if Matsuda et al. and Kwon were combined, they would fail to disclose the invention as claimed. Instead, the resultant combination would most likely not include, *inter alia*, a multiple-element electrode that includes a first sub-electrode and a second sub-electrode that are arranged having gaps as noted above. Accordingly, the proposed combination does not disclose and/or suggest all of the claimed features.

Since none of the other prior art of record discloses or suggests the claimed subject matter, Applicants respectfully submit that claim 15, and dependent claims 16-20, are allowable.

Accordingly, Applicants respectfully request that the rejection over claims 15-20 be withdrawn.

In view of the fact that none of the art of record, whether considered alone or in any proper combination, discloses or suggests the present invention as defined by the pending claims, and in further view of the above remarks, reconsideration of the Examiner's action and allowance of the present application are respectfully requested and are believed to be appropriate.

Dependent Claims

With regard to dependent claims 2-14 and 16-20, Applicants assert that these claims

are allowable on their own merit and at least because they depend on one of independent claims, which Applicants submit have been shown to be allowable.

CONCLUSIONS

Applicants submit that a full and complete response has been made to the pending Office Action and respectfully submit that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicants respectfully submit that all pending claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is thus respectfully requested to pass the above application to issue.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicants' undersigned representative at the number below to expedite prosecution. Prompt and favorable consideration of this Amendment is respectfully requested. Applicants respectfully request that a timely Notice of Allowance be issued for this application.

Respectfully Submitted,


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